

Remarks

Reconsideration of remaining claims 11, 12, 18 and 19 is respectfully requested.

In the Office action dated September 16, 2004 (application Paper No. not shown), the Examiner objected to claim 11 and rejected all pending claims under 35 USC §§ 102(e) and 103(a). The Examiner's objection and rejections will be discussed below in the order appearing in the Office action.

Claim Objection

The Examiner first objected to claim 11 in that the preamble described forming an etalon with a transition region being "not parallel" to the opposing side. Applicant has corrected the description of this transition region to now read *--not perpendicular--*, where as defined by claim 11 the intent of the present invention is to "smooth" the conventional, abrupt perpendicular transition regions between adjacent steps in the etalon. With this amendment, applicant believes that the Examiner's objection is fully addressed and that claim 11 is in condition for allowance.

35 USC § 102(e) Rejection - Claims 11, 12

Claims 11 and 12 were next issued a Final rejection by the Examiner under 35 USC 102(e) as being anticipated by US Patent 5,784,507 (Holm-Kennedy et al.), where the Examiner cited Holm-Kennedy et al. as teaching "using etching to fabricate a stepped etalon in which the transition regions between steps is not parallel to the opposing side".

In response, and as asserted in response to the previous Office action, applicant asserts that Holm-Kennedy et al. does not disclose or suggest an etalon structure that comprises "a plurality of steps" as required by rejected independent claim 11. The Holm-Kennedy et al. reference is directed to the formation of a "wedge"-type etalon structure, where the "first side" (using the reference names from claim 11) is continuously tapered with respect to the "second side". There are no separate "steps". Applicant has amended claim 11 to further define a "step" as being parallel to the second side of the etalon. As first formed, a stepped etalon structure thus includes a set of "steps" (parallel to the second side) with abrupt transitions between adjacent steps. This is indeed the structure

“provided” in the first step of claim 11. Holm-Kennedy et al. does not “provide” this type of structure. Rather, Holm-Kennedy et al. “provides” a wedge etalon structure.

Therefore, applicant asserts that Holm-Kennedy et al. cannot be found to “anticipate” the step of “further processing the etalon body to make each transition region on said first side non-perpendicular to the opposing second side”, as defined by claim 11. Indeed, since Holm-Kennedy et al. does not describe the use of “steps” with “abrupt transitions” there is no need to perform “further processing” to modify the abrupt transitions.

Based on the differences between independent method claim 11 and the teaching of Holm-Kennedy et al., applicant asserts that Holm-Kennedy et al. cannot be found to “anticipate” the subject matter of claim 11 (or dependent claim 12), as cited by the Examiner. Applicant thus respectfully requests the Examiner to reconsider this rejection and find claims 11 and 12 to be in condition for allowance.

35 USC § 103(a) Rejection - Claims 11, 12, 18 and 19

The Examiner next rejected claims 11, 12, 18 and 19 under 35 USC 103(a) as being unpatentable over US Patent 6,015,976 (Hatakeyama et al.) in view of US Patent 5,293,548 issued to Siebert. The Examiner cited Hatakeyama et al. as teaching a method of making optical filters using an angled beam through a mask and Siebert is cited as teaching “a stepped etalon wherein the transition region between steps is not parallel to the opposing surface”.

In response, applicant asserts that the cited portion of Hatakeyama et al. describes the formation of an “optical lens” (see FIG. 77), using an energy beam to form the curved surface of the lens such that a first wavelength is focused into a first region and a second wavelength is focused into a second region. Hatakeyama et al., it is asserted, does not disclose or suggest “providing an etalon”, as defined by claim 11. Seibert et al. describes an arrangement using a plurality of coating layers to form an etalon. There is no teaching in Seibert et al. of “further processing” a conventional etalon structure to form non-perpendicular transition regions.

Based on the above, applicant asserts that the combination of Hatakeyama et al. and Siebert cannot be found to render obvious the subject matter of the present invention.

Applicant thus respectfully requests the Examiner to reconsider this rejection and find claims 11, 12, 18 and 19 to be allowable over this combination of references.

35 USC § 103(a) Rejection - Claims 11, 12, 18 and 19

Lastly, the Examiner rejected the pending claims under 35 USC 103(a) as being unpatentable over the combination of Holm-Kennedy et al. (as applied to claim 11), when considered with Hatakeyama et al.

In response, applicant again asserts that Holm-Kennedy et al. does not disclose *per se* a "stepped etalon" for the reasons discussed above. Indeed, applicant believes that Holm-Kennedy et al. is limited in its teaching to disclosing a "wedge"-type etalon structure.

Applicant thus respectfully requests the Examiner to review amended independent claim 11 and find the subject matter of claim 11, as well as claims 12, 18 and 19 to now be allowable over the cited combination of Holm-Kennedy et al. and Hatakeyama et al.

Applicant believes that the case, in its present form, is now in condition for allowance and respectfully requests an early and favorable response from the Examiner in that regard. If for some reason or other the Examiner does not believe that the case is ready to issue and that an interview or telephone conversation would further the prosecution, the Examiner is invited to contact applicant's attorney at the telephone number listed below.

Respectfully submitted,

Stephen O'Brien

By: Wendy W. Koba
Wendy W. Koba
Reg. No. 30509
Attorney for applicant
610-346-7112

Date: 11/16/04